availability of up-to-date usage data, as well as general customer service support for the resale carrier as the customer. A customer or prospective customer of a resale carrier will direct its anger at the resale carrier for whatever delays may be experienced in processing initial service orders or orders for service modifications even if the cause of the delay is the underlying incumbent LEC. And because the incumbent LEC will benefit from rifts in the relationship between the resale carrier and it customers, there is a strong incentive to delay or confuse processing of service orders.[51] Because a resale carrier cannot bill its customers in the absence of timely, complete and accurate billing tapes, billing tapes can be strategically structured and delivered so as to achieve anticompetitive ends, adversely effecting a resale carrier's cashflow, ability to collect from its customers and ability to honor its commitments to the incumbent LEC. Lack of "real-time" or up-to-date controls on customer usage can result in failures to identify and halt service abuses, the cost of which will be borne by the resale carrier. And a lack of customer support for the resale carrier by the incumbent LEC will adversely impact the resale carrier's ability to perform such functions for its subscribers.

TRA acknowledges that it is difficult, if not impossible, for the Commission to specify precise provisioning intervals and billing requirements. The Commission could, and should, however, send a clear message that abuses in the areas of provisioning, billing, and customer support will not be tolerated, that discriminatory treatment of resale carriers is unlawful,

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[51] If a resale carrier commits to provide a customer with service at a lower rate and because of delayed processing of its order by the underlying incumbent LEC, the customer does not see rate reductions for a period of months, the customer may well abandon the resale carrier, assuming that it was misled by that entity. Likewise, if a customer requires prompt modification of its service and the resale carrier cannot deliver because the underlying incumbent LEC is slow-rolling provisioning, the customer may look elsewhere for service.

and that complaints regarding such matters will be treated seriously and resolved expeditiously. Moreover, the Commission could establish outer bounds of reasonableness which would provide a measure of guidance to incumbent LECs in their dealings with resale carrier customers. For example, the Commission could direct that service orders submitted by resale carrier customers must be processed as expeditiously as possible, but must be completed within at least 15 days or, if shorter, the same timeframe within which the incumbent LEC processes its own retail orders.[52] The Commission could direct that billing tapes must be delivered to resale carrier customers as quickly as possible, but in no event later than 10 days following the end of the billing cycle and that any charges which are not included on a tape received by the resale carrier within 60 days of their accrual may not be billed by the incumbent LEC. The Commission could direct that customer service support provided to a resale carrier must be of a quality equal to that provided by the incumbent LEC to retail customers with comparable traffic and/or service volumes.[53] And the Commission could require that in situations in which the service provided to resale carriers is not equal to the service provided to the incumbent LEC's retail subscribers, further discounts must be provided to account for the difference.

Operational abuses by network providers in the interexchange market have severely hindered, and far too frequently, destroyed, the operations of resellers of long distance service.

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[52] The Commission could require "on-line" electronic ordering capability which reduces substantially service processing intervals and significantly enhances processing accuracy.

[53] The Commission could require "on-line" usage monitoring capability which would allow a resale carrier to quickly detect abuse of service by individual customers, as well as to monitor service quality. The Commission could also require periodic service reports which have now become routine in the interexchange industry.

Incumbent LECs have much greater market power than any interexchange carrier ("IXC") and there are far fewer competitive alternatives in the local telecommunications market. Strict Commission oversight is hence critical to realization of operationally viable local telecommunications resale.

3. The Commission Should Clarify The Nature And Extent Of "Avoided Costs" (¶¶ 178 -188)

Section 252(d)(3) of the '96 Act defines "wholesale rates" as retail rates charged to subscribers for the telecommunications service requested, "excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier."[54] The Commission seeks comment regarding its authority to promulgate rules for the States to apply in computing wholesale rates and given such authority, the content of the rules it should adopt.[55] Finally, the Commission seeks comment on the relationship between rates for unbundled network elements and rates for wholesale or retail service offerings.[56]

As discussed above, Section 251(d)(1) directs the Commission to establish regulations to implement the Section 251(b)(1) and 251(c)(3) resale requirements, among others. And again as noted above, not only is meaningful wholesale pricing crucial to ensuring the viability of traditional "total service" resale, but in order to ensure the rapid emergence and short-term growth of a dynamic local resale industry, it is critical that the Commission mandate

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[54] 47 U.S.C. § 252(d)(3).

[55] Notice, FCC 96-182 at ¶ 178-183.

[56] Id. at ¶ 184-188.

detailed minimum wholesale pricing standards, thereby thwarting efforts by incumbent LECs to "game" the processes in individual states. Thus, TRA submits that the Commission has, and should exercise, the authority to adopt rules that the States would apply in determining wholesale rates in given markets.

As to the level of such rates, quantifying "avoided" marketing, billing, collection, and other costs is far from a precise exercise. Estimates of the percentage that such costs represent of retail rates will likely range from 10 to 50 percent. And there certainly is no absolute answer. From a pure policy perspective, it is crucial to bear in mind that margins of 30 to 50 percent are required to provide for a viable resale business. An amount below this range would fall short of implementing the Congressional desire to speed competitive entry by multiple local telecommunications providers, the vast majority of whom must necessarily commence service, and at least in the short term, operate, as resale carriers.

That having been said, the Commission must determine how best to calculate avoided costs and wholesale rates in order to guide the States in fulfilling the intent of Congress. Certain principals should be applied in this exercise. First, the greater the extent of the quantifiable guidance, the better; the more nebulous the requirements, the more likely it is that resale margins will be set at unworkable levels. Second, an allocation of costs attributable to general overhead and other common costs should be included in avoided costs; incumbent LECs have always used these costs to inflate prices, it is only fair that they now be used to ensure meaningful wholesale rates. Third, cost and rate calculations undertaken by incumbent LECs should be highly detailed, fully supported by documentary evidence and publicly available; no one should be permitted to hide behind summery data or claims of proprietary inputs.

Commission requirements should represent mandatory "floors"; the States should be authorized to add to, but not to delete from, these requirements unless they petition the Commission for and are granted an express exemption. Fourth, allocations of avoided costs must be uniform; any flexibility allowed in allocating costs is an invitation to strategic rate manipulation by the incumbent LECs.

TRA believes that the Commission's suggestion that it identify specific accounts, or portions thereof, in its Uniform System of Accounts ("USOA") for inclusion among avoided costs is perhaps the best means of providing quantifiable guidance to the States, the incumbent LECs and resale carriers.[57] These accounts are well established, clearly defined and consistent across carriers and hence are less subject to dispute and/or manipulation. Not only are relatively current data available under these accounts, but such data are regularly updated. Moreover the data are publicly available and non-proprietary.

TRA submits that a number of the Commission's Part 32 USOA Accounts are obvious candidates for inclusion in their entirely in an avoided cost calculation: accounts containing marketing expenses (§§ 32.6611 (product management), 32.6612 (sales), 32.6613 (product advertising)), and customer service expenses (§§ 32.6621 (call completion services), 32.6622 (number services), 32.6623 (customer services)) fit into this category. Allocable portions of other accounts should also be included in an avoided cost calculation: accounts including network support expenses (§§ 6112 - 6116); general support expenses (§§ 6121 - 6124); depreciation expense (§§ 6561 - 6565); executive and planning expenses (§§ 6711 - 6712);

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[57] 47 C.F.R. § Part 32.

general and administrative (§§ 6721 - 6728); and certain operating tax expenses (§§ 7220 - 7240) contain costs that would be avoided through resale. Likewise, an allocable portion of uncollectibles, interest deductions and total returns should also be included in the avoided cost calculation.

With respect to Commission inquiries regarding the interrelationship between rates for unbundled network elements (which TRA will discuss below) and rates for wholesale or retail offerings, TRA agrees with those States which require that the sum of the rates for unbundled network elements not exceed the retail cost of the service and urges the Commission to adopt a similar rule. Such an "imputation rule" would, as the Commission notes, "prevent anticompetitive price squeezes by incumbent LECs," prohibiting them from "set[ting] unbundled element prices too high in order to discourage new entrants from purchasing unbundled elements instead of purchasing and reselling the bundled services."[58] Moreover, the imputation rule should be applied even if the result is that the incumbent LEC must offer unbundled network elements to its competitors at prices less than cost. Such an approach would not only be pro-competitive, but it would incent the States to eliminate non-competitively neutral, implicit subsidy flows. Notwithstanding the above, application of the imputation rule should seldom be necessary if unbundled network elements are priced, as directed by the '96 Act, at cost.[59]

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[58] Notice, FCC 96-182 at ¶ 184.

[59] 47 U.S.C. § 252(d)(1).

C. The Commission Should Facilitate The Development Of "Virtual Networks" Comprised In Whole Or In Part Of Unbundled Network Elements (¶¶ 74 -116)

The '96 Act recognizes two alternative means by which non-facilities-based carriers may enter the local telecommunications market as competitive providers of local exchange/exchange access services. The first, as discussed above, is accomplished by means of traditional "total service" resale pursuant to which a resale carrier will resell retail services acquired from incumbent LECs at wholesale prices. The second is accomplished by developing "virtual networks" created by combining individual network elements acquired on an unbundled basis in accordance with Section 251(c)(3) and by utilizing such "virtual networks" to provide local exchange/exchange access services. Section 251(c)(3) imposes on incumbent LECs "[t]he duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point . . . "[60] And critically, Section 251(c)(3) requires that such unbundled network elements must be provided "in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service."

In short, Section 251(c)(3) provides an alternate means of providing competitive local telecommunications services without the immediate need to invest in "bricks and mortar". An entity electing to enter the local market in this manner differs from a traditional resale carrier in that such an entity will not be reselling "minutes" carried, or services provided, by an incumbent LEC. Rather, it will be operating a network, albeit a "virtual" rather than a "physical"

[60] 47 U.S.C. § 251(c)(3).

network, and providing service on that network in much the same manner that the incumbent LEC provides service on its network. Among TRA's resale carrier members, there will be a large component that will engage in traditional "total service" resale, but a not insignificant number that will avail themselves of the opportunities provided by Section 251(c)(3) to create "virtual" local exchange/exchange access networks. Of the latter group, a substantial percentage will ultimately deploy "physical" network components, while others will continue to operate solely as non-facilities-based carriers.

1. The Commission Should Not Unduly Restrict The Ability Of Competitive Entrants To Construct "Virtual" Local Telecommunications Networks (¶¶ 74 -91)

The Commission has sought comment on potential restrictions on the purposes for which "virtual networks" comprised of unbundled network elements may be used. Specifically, the Commission has asked whether entities acquiring unbundled network elements should be allowed to use such elements to provide "all services, intrastate and interstate, that use the element[s]."[61] The Commission has also queried whether "requesting carriers [may] order and combine network elements to offer the same services an incumbent LEC offers for resale under subsection (c)(4)."[62] The Commission also seeks guidance on such diverse issues as whether it should establish minimum requirements for provisioning and service intervals, nondiscrimination

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61 Notice, FCC 96-182 at ¶ 75.

62 Id at ¶ 85.

safeguards and technical standards, the extent to which access should be granted to "proprietary" network elements and the manner in which unbundled network elements should be priced.[63]

The mandate of Section 251(c)(3) is clear; incumbent LECs must make available unbundled network elements so that they may be combined to provide telecommunications services. The only qualifier to this mandate is Section 251(d)(2)'s directive to the Commission to consider the necessity of requiring unbundled access to "proprietary" network elements. Add to this near-absolute directive the benefits to be derived from the competition the ability to combine unbundled network elements to provide telecommunications service would "foster . . by ensuring that new entrants wishing to compete with incumbent LECs can purchase access to those network elements that they do not possess, without paying for elements that they do not require"[64] and it becomes clear that the answer to the first two questions posed above by the Commission is an emphatic yes.

As noted above, entities who acquire and combine unbundled network elements are constructing "virtual networks" which although "virtual" rather than "physical" are nonetheless functional networks. Such entities, accordingly, should have the same flexibility as operators of "physical" networks to provide such services as their business plans allow and their customers desire. Such entities will likely have assumed certain, perhaps substantial, risks in leasing facilities and, accordingly, they should be able to utilize the leased facilities in the manner most advantageous to them. Just as an IXC that leases a DS3 link between two geographically

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[63] Id at ¶¶ 84 - 91.

[64] Id at ¶ 75.

separate cities assumes the responsibility to pay the associated monthly recurring charges and hence the risk that it can fill that pipe with enough traffic to justify its cost, an entity which creates a "virtual network" out of unbundled network piece parts must pay for and effectively utilize the network elements it leases and thus must be afforded the flexibility to best achieve this end.

Is the operational nature of and the risk attendant to the creation of a virtual network different from that associated with traditional "total service" resale? Of course, by a substantial degree! Local resale under Section 251(c)(4) is akin to "switchless" resale in the interexchange environment. It involves the sale of minutes or perhaps lines or discrete services. The provision of service on a "virtual network" comprised of unbundled network elements is more like a "switched-based" IXC that leases intercity transmission circuits and rises or falls based on its ability to generate sufficient traffic to cost-justify both owned and leased facilities. The latter is buying capacity, not minutes of use. The operations are different; the assumed risks are different. Just as different pricing standards apply to "switchless" and "switched-based" interexchange resale carriers, so too can different pricing standards be applied to those availing themselves of entry opportunities under Sections 251(c) (3) and 251(c)(4).

With respect to the Commission's query whether it should establish minimum requirements for provisioning and service intervals, nondiscrimination safeguards and technical standards, the answer is again an emphatic yes. As discussed above with respect to traditional "total service" resale (at pp. 20-23, supra), the legal right to take network elements on an unbundled basis does not necessarily ensure operational viability; absent efficient and reliable provisioning and service quality comparable to that provided by the incumbent LECs to their retail subscribers, the ability of a "virtual network" operator to compete effectively will be severely undermined. Accordingly, in line with its recommendations with respect to traditional "total service" resale, TRA urges the Commission to establish minimum provisioning and service quality standards with respect to the availability of unbundled network elements. With respect to provisioning, TRA suggests that the Commission not only impose outside limits on the timeframes within which service orders must be processed and implemented, but mandate that provisioning and service intervals for competing carriers must be no greater than they are on average for the retail subscribers of the incumbent LEC providing the service. Similarly, service quality for competing carriers should be no less than the average quality levels achieved by the serving incumbent LEC with respect to service provided to its retail subscribers. Moreover, to the extent practicable, the Commission should develop minimum national service quality standards which will provide benchmarks marking the outer bounds of reasonableness. Perhaps most critically, the Commission must promptly and effectively address complaints of discriminatory behavior lodged by competitive providers of local telecommunications services, scrutinizing closely the practical effects of an incumbent LEC's conduct on the ability of the complaining carrier to compete effectively.

As to exceptions for "proprietary" network elements, TRA submits that any failure by an incumbent LEC to provide access to a network element on this basis should be analyzed closely. There should be few, if any, such exceptions granted. Even network elements which are legitimately classified as proprietary were developed in a monopoly environment and are therefore not necessarily deserving of protection. Moreover, if the failure to provide access to a "proprietary" network element would hinder a alternative provider's ability to compete, the private interest should give way to the public good.

Finally, TRA agrees with the Commission that each unbundled network element should be priced separately. As discussed later, however. each such rate must be reflective of the true cost of providing that element.

2. The Commission Should Require Extensive Unbundling Of Network Elements Within A Construct That Can Flexibly Add Additional Unbundled Elements (¶¶ 77-83, 86-87, 92-116)

Several key principals should guide the Commission in fulfilling its obligations under Section 251(d)(2) to "determin[e] what network elements should be made available for purposes of subsection (c)(3)."[65] First, consistent with the recommendations set forth in Section II(A) of these comments, the Commission should specify a level of unbundling sufficient, without more, to fully implement the Congressional intent embodied in Section 251(c)(3). TRA agrees with the Commission that it should allow the States the flexibility to impose additional unbundling requirements,[66] but the unbundling mandated by the Commission should provide the "floor" level of disaggregation. The advantages of such an approach, as set forth in Section II(A) of these comments, are numerous and of course include minimizing opportunities for the "gaming" of the regulatory process by incumbent LECs. Second, the Commission should reserve the flexibility, and establish procedures, to subject additional network elements to the Section 251(c)(3) unbundling requirement. Any such process should be easily activated, conducted in

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65 47 U.S.C. § 251(d)(2).

66 Notice, FCC 96-182 at ¶¶ 77-78.

a streamlined fashion and otherwise designed to respond quickly to technological change. Third, TRA agrees with the Commission's tentative conclusion that a presumption should arise from one LEC's unbundling of a particular network element that it is "technically feasible" for all other LECs with comparable networks to provide that same network element on an unbundled basis; the burden of proving that it is technically infeasible to offer a given network element on an unbundled basis, accordingly, should fall squarely on the shoulders of the incumbent LEC making that claim.[67]

With these principals in mind, TRA recommends that in identifying the network elements to be unbundled pursuant to Section 251(c)(3), the Commission endorse the recommendations of AT&T and MCI identified in the Notice as the threshold level of unbundling required by Section 251(c)(3), but that this list be expanded, as appropriate, based on materials submitted by these and other commenters in response to the Notice. General categories of unbundling hence should include "loop elements," "end office switching," "operator systems," "transport elements," and "database and signalling elements."

The loop elements should include at least four unbundled loop subelements: network interface (the termination device that establishes the point of demarcation between the network and the customer's wiring), loop distribution (the physical wire connected to the network interface at the customer's premises), loop concentrator/multiplexer (the network equipment that multiplexes and concentrates traffic from multiple loop distribution facilities) and loop feeder (the transmission facility used to transmit traffic between the loop concentrator/multiplexer and the

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[67] Id at ¶ 87.

central office switch). The technical feasibility of interconnecting these loop subelements is well established and as the Commission has recognized, unbundling of such loop subelements is already mandated in several states.[68] From a competitive prospective, unbundling of these loop subelements would provide new market entrants that desire to deploy initially only local fiber rings and switches access to the local distribution facilities necessary to reach individual subscribers. It would also provide cable television ("CATV") providers who have distribution plant in place with access to the facilities necessary to transport traffic to the incumbent LEC's central office switches.

The technical feasibility of interconnecting competitors' switches to incumbent LEC loops is well established and technical specifications exist as well for interconnecting competitors' loops to incumbent LEC switches. Providing end office switching as an unbundled network element is also technically feasible through what the Notice refers to as a lease of "'virtual' switch capacity."[69] Under this approach, a competing non-facilities-based carrier would commit to take from the incumbent LEC a certain level of capacity reflected in numbers of ports, trunk port capacity and busy hour switch capacity. In so doing, the competing carrier would effectively assume a portion of the incumbent LEC's investment in a switch. Such an approach would provide the competing carrier with access to the full array of local telecommunications services available through the switch, including, as the Commission has recognized, "dialtone, telephone number provision, all CLASS and CCF features, originating and terminating usage and

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[68] Id at ¶ 97.

[69] Id at ¶ 100.

911 service."[70] From a competitive perspective, unbundling of local switching would permit new market entrants to avoid paying the incumbent LEC for the facility they are most likely to deploy first in a market, while at the same time providing CATV providers with switching capability to complement their distribution facilities.

The transport elements should include at least three unbundled transport subelements: dedicated transport (a dedicated interoffice transmission path between an end office or tandem switch and an IXC point of presence ("POP") or a CLEC switching system), common transport (a shared interoffice transmission path between an end office and a tandem switch or between other network points), and tandem switching (a switching facility used to connect common trunks to dedicated trunks for purposes of interconnecting multiple switches, including switches operated by IXCs and CLECs). Unbundled dedicated transport is currently available and published standards exist for interconnecting common transport to tandem and end office switches. The technical feasibility of unbundling tandem switching tracks the discussion above with respect to the feasibility of providing end office switching on an unbundled basis. From a competitive perspective, unbundled transport, in conjunction with tandem switching, is necessary to provide competitors with critical switch-to-switch interconnectivity, linking their switches and those operated by the incumbent LECs, as well as the IXCs.

The database and signalling elements should include at least three unbundled database and signalling subelements: signalling links (transmission facilities used to carry "out-of-band" signalling messages between and among end offices or tandem switches and signal

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[70] Id.

transfer points ("STPs"), among multiple STPs, and between STPs and service control points ("SCPs")), signal transfer points (a signalling facility that interconnects signalling links), and service control points (a database node resident on a signalling network). Interconnection to and among multiple signalling networks is now commonplace. There appears to be no technical impediment to connecting a CLEC switch (directly or indirectly) to an incumbent LEC's STP/SCP or a CLEC signalling network to an incumbent LEC's signalling network via signalling links obtained from the incumbent LEC or otherwise. From a competitive perspective, unbundling of database and signalling elements is critical for three reasons. First, the cost of deploying and maintaining SCPs is massive and for that reason database and signalling services are likely to be among the last facilities invested in by new entrants who are otherwise engaged in constructing "physical" networks. Second, competitive providers of signalling services have emerged and likely will offer cost-effective alternatives to the signalling services provided by the incumbent LECs. Third, the functionality provided by database and signalling services is critical to the successful provision of an attractive alternative local telecommunications service. Putting aside such fundamental features as call setup and specialized call routing, database and signalling services also allow for the provision of such popular services as CLASS features.

Finally, operator systems are commonly provided on an unbundled basis today and thus the technical feasibility of offering this network element on an unbundled basis is beyond dispute. From a competitive perspective, new market entrants will need to provide the operator services the public has come to expect, but will likely postpone deployment of their own operator systems until other more critical network components have been completed.

3. The Commission Should Designate Total Service Long Run Incremental Cost As The Standard For Pricing Unbundled Network Elements (¶¶ 117 - 157)

As a "pricing standard" for setting "the just and reasonable rate for network elements for purposes of subsection (c)(3)," Section 252(d)(1) of the '96 Act identifies the "cost . . . of providing the . . . network element" plus "a reasonable profit."[71] It is to this standard to which the Commission must give meaning in fulfilling the obligation imposed on it by Section 251(d)(1) to provide for competitive access to unbundled network elements at "rates that are just, reasonable and nondiscriminatory."[72] And it is pursuant to Section 251(d)(1) that the Commission must provide guidance to the States in fulfilling their responsibility to determine just and reasonable rates for unbundled network elements under Section 252(d)(2). While the Commission and the States thus both have a role in pricing unbundled network elements, it is the Commission that must establish the methodology that the States will apply in individual instances. For all the reasons set forth in Section II(A) of these comments, TRA urges the Commission to establish detailed national pricing principals to guide the States, thereby providing a necessary measure of certainty to the process.

As it has elsewhere in these comments, TRA urges the Commission to apply certain fundamental principals in ascertaining the proper pricing methodology for unbundled network elements, bearing in mind that the viability of the competitive non-facilities-based provision of local telecommunications offerings is as much contingent upon appropriate pricing

[71] 47 U.S.C. § 252(d)(1).

[72] 47 U.S.C. §§ 251(c)(3) and 251(d)(1).

as it is on the extent to which the network is unbundled. Obviously, it makes little difference that unbundled network elements are made available to competitors if such network elements are priced in a manner that renders it impossible to provide a competitive service offering. To avoid this eventuality, TRA suggests that the Commission adhere to the following guidelines:

First, the costs that serve as the foundation for the just and reasonable rates for access to unbundled network elements should be "forward-looking." It is anticipated costs and revenues upon which judgments regarding competitive entry are made[73] and thus a forward-looking measure of cost would more closely replicate competitive outcomes than would historical costs. And as the Commission has correctly noted, its statutory mandate is to "permit[] efficient competition to occur wherever possible, and [to] replicat[e] competitive outcomes where competition is infeasible or not yet in place."[74] Historical costs produce the opposite result because they were heavily impacted by a regulatory environment which has been displaced. Certainly, forward looking costing is consistent with the Section 252(d)(1(A)'s directive that costs "be determined without reference to a rate-of-return or other rate-based proceeding."[75]

Second, the costs associated with providing unbundled network elements should reflect the most efficient available technology. Once again, decisions regarding competitive entry are not based on old or outmoded technology or system architectures. New entrants will be

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[73] As the Commission has long recognized,current or anticipated costs and revenues are generally the relevant factors influencing business decisions to enter markets and price products." Policies and Rules Concerning Rates for Dominant Carriers (Further Notice of Proposed Rulemakings), 3 FCC Rcd. 3195, 3226-27 (1988).

[74] Notice, FCC 96-182 at ¶ 12.

[75] As is apparent, in TRA's view, an incumbent LEC's embedded or historic costs bear no relevance to the determination of cost-based rates under Section 252(d)(1).

compelled by competitive pressures to provide service in the most cost-effective and efficient manner. Thus in order to "replicate competitive outcomes," unbundled network elements must be priced in a like manner.[76]

Third, prices for access to unbundled network elements should be predicated on long run incremental costs. As the Commission has acknowledged, "prices based on [long-run incremental costs] give appropriate signals to producers and consumers and ensure efficient entry and utilization of the telecommunications infrastructure."[77]

Reflective of and applying these principals, TRA joins with what the Commission has described as "the broad range of parties . . . [who] agree that rates for . . . unbundled elements should be based on some type of [long run incremental cost] methodology" and endorses the "'total service long-run incremental cost' (TSLRIC) approach."[78] TSLRIC measures the forward-looking additional costs incurred by an incumbent LEC in adding an entire service to the carrier's existing array of services and hence captures all additional resources, including capital, labor and profit, associated with the particular unbundled network element being so costed, assuming of course that the incumbent LEC continues to provide all of its other services and functionalities. Indeed, because it is a long run costing methodology, TSLRIC accounts for fixed costs directly associated with the network element being costed, as well as pertinent volume-sensitive costs. TSLRIC costing is also compensatory because it incorporates a cost-of-

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76 Because cost-based rates for unbundled network elements should "replicate competitive outcomes," they certainly should not include universal service costs or subsidies.

77 Notice, FCC 96-182 at ¶ 124.

78 Id. TRA also supports use of a TSLRIC cost model to set interconnection rates as well.

capital component that corresponds to the competitive rate of return on necessary investments associated with the subject network element. In other words, TSLRIC provides a solid proxy for a competitive market outcome. As such, TSLRIC pricing of unbundled network elements would thus provide valid signals to prospective market entrants, allowing for rational decisionmaking in the determination of whether and when to construct a "physical" network.

It has been argued that TSLRIC costing can result in an under-recovery of facilities costs in circumstances involving significant sharing of fixed facilities. It has also been suggested that TSLRIC costing is inappropriate because it does not include a contribution to common overhead costs. The first criticism is theoretically correct, but of little practical consequences here because the various network elements being costed are relatively self-contained groupings which do not share significant facilities among them.[79] The second point is also true as a theoretical matter, but also of minimal practical impact here because TSLRIC, as a long run methodology which reflects the long run impact of the discontinuance of a network element, recognizes very few truly fixed costs that would be categorized as shared overhead costs. Hence, proposals to include joint, common and/or residual costs in the calculation of the costs associated with an unbundled network element would actually distort results.

As a short term interim measure, however, TRA would not oppose the use of a transitional pricing mechanism. TRA agrees with the Commission that setting rates at short-run marginal cost during an interim period would not only allow for prompt implementation, but would provide incumbent LECs an incentive to reach rapid agreements with new market

[79] A loop is obviously physically distinct from an end office switch which is physically distinct from transport facilities.

entrants.[80] Moreover, use of such an interim approach would provide the time necessary to conduct whatever further cost-modeling the Commission deemed necessary in formulating a long term solution utilizing TSLRIC methodology.

TRA does not support, however, the use of proxy-based outer bounds for reasonable rates. First, they are unnecessary; rates can and should be set on a company-by-company basis. Generic or averaged costs should only be utilized when actual costs cannot be identified and here company-specific costs can be tracked. Moreover, to the extent the proxies identified in the Notice rely on current interstate access charges or existing interconnection agreements, they would, in the case of the former, be inflated by embedded subsidies and excess costs left over from the era of rate-of-return regulation, and in the case of the latter, be distorted by the unequal bargaining power of the parties and lack necessary consistency.

TRA does, however, endorse the Commission's tentative conclusion that rates predicated on the efficient component pricing rule ("ECPR") are inconsistent with the mandate of Section 252(d)(1) that unbundled network elements be priced at cost.[81] As the Commission correctly notes, "[u]nder the ECPR, competitive entry does not drive prices toward competitive levels, because it permits the incumbent carrier to recover its full opportunity costs, including any monopoly profits."[82] Because such a result is the antithesis of the pro-competitive intent of the

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[80] Notice, FCC 96-182 at ¶ 132.

[81] Id at ¶ 147.

[82] Id.

'96 Act, TRA applauds the Commission's proposal to preclude States from applying the ECPR methodology.

With respect to rate structure, TRA agrees with the Commission's view that "costs should be recovered in a manner that reflects the way in which they were incurred."[83] To this end, TRA agrees with the Commission that dedicated facilities should generally be priced on a non-traffic sensitive ("NTS") or "flat-rated" basis, thereby ensuring that the sole customer "will pay the full cost of the facility, and no more."[84] The Commission is also correct that the costs associated with shared or common facilities should be recovered "in a manner that efficiently apportions costs among users that share the facility,"[85] which can mean flat-rated or usage-sensitive pricing or both. Applying these concepts, TRA submits that the Commission should adopt certain rate structure principals to guide the States. At a minimum, the Commission should mandate that dedicated facilities must be priced on a flat-rated basis. Moreover, the Commission should require, where practicable, that LECs offer a flat-rated option with respect to common facilities and bear the burden of justifying instances in which they allege that such an option is not workable. For example, a CLEC could reserve for its exclusive use a portion of the capacity of an incumbent LEC's end office switch for a fixed charge or it could elect to pay only for its precise use of switching facilities on a traffic sensitive basis; the incumbent LEC should be required to afford the CLEC a choice between these two options.

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[83] Id at ¶ 150.

[84] Id.

[85] Id at ¶ 151.

D. TRA Supports The Commission's Proposals For Implementing The Interconnection/Collocation Mandates Of The '96 Act (¶¶ 49 - 73)

Section 251(c)(2) of the '96 Act imposes on incumbent LECs the duty to provide "any requesting telecommunications carrier" with the opportunity to interconnect its "facilities and equipment" with the local exchange carrier's network (i) "for the transmission and routing of telephone exchange service and exchange access," (ii) "at any technically feasible point within the carrier's network," (iii) with quality "at least equal . . . to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to with the carrier provides interconnection, and (iv) "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory . . . "[86] Pursuant to Section 251(d)(1), the Commission is directed to establish regulations implementing this requirement.[87]

In fulfillment of this statutory mandate, the Commission has proposed to adopt "uniform national rules for evaluating interconnection arrangements," tentatively concluding that such "uniform interconnection rules would facilitate entry by competitors in multiple states by removing the need to comply with a multiplicity of state variations in technical and procedural requirements."[88] For the reasons set forth in Section II(A) of these comments, TRA wholeheartedly endorses the Commission's views in this respect. The long term interests of TRA's resale carrier members will be best served by the speedy deployment of alternative local

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[86] 47 U.S.C. § 251(c)(2).

[87] 47 U.S.C. § 251(d)(1).

[88] Notice, FCC 96-182 at ¶ 50.

telecommunications networks. Experience in the interexchange telecommunications market has shown that the deployment of multiple networks provides the resale industry with a substantial boost, particularly if the operators of the newly-deployed networks are "hungry" for market share. Given that uniform interconnection rules will, as the Commission has suggested, "likely speed the negotiation process by eliminating potential areas of dispute" and minimize "the potential for incumbent LECs to delay entry," TRA urges the Commission to expeditiously promulgate detailed national rules for evaluating interconnection arrangements.[89]

To this end, TRA endorses the Commission's tentative conclusion that interconnection at a particular point within an incumbent LEC's network should be considered "technically feasible" within the meaning of Section 251(c)(2) if the incumbent LEC "currently provides, or has provided in the past, interconnection to any other carrier at that point" and that "all incumbent LECs that employ similar network technology should be required to make interconnection at such points available to requesting carriers."[90] Likewise, TRA agrees with the Commission that if a dispute arises, the "burden of demonstrating that interconnection at a particular point is technically infeasible" should fall on the incumbent LEC.[91] And, TRA supports the Commission's view that "if risks to network reliability are considered in determining whether interconnection at a certain point is technically feasible, the party alleging harm to the network will be required to present detailed information to support such a claim."[92] TRA does

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89 Id.

90 Id at ¶ 57.

91 Id at ¶ 57.

92 Id at ¶ 56.

not disagree that the States should be permitted to "designate additional technically feasible interconnection points," but strongly urges the Commission, in conjunction with the principals discussed above, to identify the core points of interconnection.[93]

In a similar vein, TRA urges the Commission to "adopt explicit national standards for the terms and conditions of interconnection," including "uniform national guidelines governing installation, maintenance, and repair of the incumbent LEC's portion of interconnection facilities,"[94] as well as "standards for the terms and conditions concerning the payment of the non-recurring costs associated with installation."[95] TRA also believes that there is merit to the Commission's suggestion that the incumbent LECs should be incented to provide just, reasonable and nondiscriminatory interconnection through imposition of liquidated damages for failure "to meet agreed upon performance standards for installing or repairing interconnection facilities."[96] As TRA emphasized in its discussion of traditional "total service" resale, requirements imposed by the Commission with respect to the implementation and performance of the legally-mandated interconnection arrangement are as important as the legal mandate itself to the realization of the pro-competitive intent of the '96 Act. Reflecting the experience of its resale carrier members in the interexchange telecommunications market, TRA submits that a recalcitrant carrier will generally ignore, or find arguable means to avoid, general directives, acting only when expressly

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[93] Id at ¶ 58.

[94] Nationwide averages for such matters as speed of installation, service and repair intervals, trouble resolution performance, frequency and duration of service outages, etc. as they relate to the incumbent LECs' own operations would seemingly provide a legitimate base upon which to found such requirements.

[95] Id at ¶ 61.

[96] Id.